APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,279	03/24/2000	Gang Lu	2762.2001-002	2501

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EXAMINER
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ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *30 DAYS* ~~████~~ FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2000*.

2a)☐ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-85* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-85* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: *see attached Office Action*.

1. Claims 1-85 are presented for consideration.

2. Restriction to one of the following inventions is required
under 35 U.S.C. 121:

I. Claims 1-40, drawn to:
A *method for automatically assigning a network address* to a first
network node attached to a packet, communication network, the method
comprising the steps of communicating with at least one other network
node to collect information from inter-node communication packets
containing network address information other than an address assignment
to the first network node, determining an available network address
based on the collected network address information contained in the
collected inter-node communication packets, and applying the available
network address to the first network node; OR stated another way, a
method of retrieving a permanent network configuration by a first
network node, the method comprising the steps of determining an
available local subnet configuration, accessing a second network node
located outside the local subnet for a permanent network configuration
from a list of permanent network configurations, and assigning the
accessed permanent network configuration to the first network node; OR
stated another way, a system for automatically assigning a network
address, comprising a first network node coupled to a network and
having a list of unassigned network configurations, a second network
node coupled to the networks the second network device determines an
available network address by analyzing plurality network communication
packets, via the network, accesses the list in the first network node
to retrieve an available network configuration, and assumes the
retrieved network configuration; OR stated another way, an apparatus in
a network node coupled to a network having one or more network nodes ,
the apparatus comprising a storage means that stores a processor
routine for determining a network configuration, a processor loading
the processor routine, the processor being commanded by the processor
routine to access the network, determine an available network
configuration by analyzing plural network communication packets, and
assume the available network configuration; OR stated another way, a
processing device for automatically assigning a network configuration
to a network node coupled to a network, the processing device computing
means for gathering network addresses, and means for determining an
available network address to assign to the network device by analyzing
plural network communication packets; OR stated another way, an
interrogating network node capable of automatically assigning a network
configuration, comprising an interface, coupled to a network including
at least one other network node a processor operating a processor
routine, the processor being coupled to the interface to issue network
packets to the interface, and, access responses in the from of plural
inter-node communication packets from the other network nodes to
determine an available network address to assign to the interrogating
network node by analyzing collected network address information
contained in the plural collected inter-node communication packets.
classified in Class 340, subclass 825.52.

II. Claims 41-62, drawn to:
A *method for causing nodes on a network to correct an entry for a node*
in address tables, the method comprising the steps of using an unused

address on the network, preparing a request to the node for which the
entry is to be corrected, and forwarding the request to the node to
cause a responsive request from the node, the responsive request
causing the network nodes to correct the address tables of the network
nodes to include an address for the node which is identified in the
responsive request from the node; OR stated another way, a network node
causing nodes on a network to correct an entry for a node in address
tables, comprising an interface coupled to a network including at least
one other network node, a processor operating a processor routine, the
processor being coupled to the interface to prepare a network packet to
send to the node for which the entry is to be corrected, issue network
packets to the interface while posing as a node at an unused address on
the network, and forward the network packet to the node to cause a
responsive request from the node, the responsive request causing the
network nodes to correct the address tables of the network nodes to
include an address for the node identified in the responsive request
from the node; OR stated another way, a computer program product
comprising a computer usable medium for storing data a set of computer
program instructions embodied on the computer usable medium, including
instructions to determine an unused address on a network, prepare a
request to a node for which an entry in address tables is to be
corrected, and using the unused address, forward the request to the
node to cause a responsive request from the node, the responsive
request causing the network nodes to correct the address tables of the
network nodes to include for the node an address identified in the
responsive request from the node; OR stated another way, a processing
device for causing nodes on a network to correct an entry for a node in
address tables, the processing device comprising means for using an
unused address on a network, means for preparing a request to the node
for which the entry is to be corrected, and means for forwarding the
request to the node to cause a responsive request from the node, the
responsive request causing the network nodes to correct the address
tables of the network nodes to include for the node an address
identified in the responsive request from the node.
classified in Class 709, subclass 245.

III. Claims 63-84, drawn to:
A method for automatically determining a subnet mask by a first network
node attached to a subnet in a packet communication network, the method
comprising the steps of issuing plural communication packets from
plural source addresses to at least one address known to be used in the
subnet to evoke responses. and based on the presence or absence of
responses from the network nodes at the known addresses, determining
the subnet mask which represents the subnet; OR stated another way, A
network node attached to a subnet capable of automatically determining
a subnet mask in a packet communication network, comprising an
interface coupled to a subnet including at least one other network
node, and a processor operating a processor routine, the processor
being coupled to the interface to issue plural communication packets
from plural source addresses to at least one address known to be used
in the subnet to evoke responses, based on the presence or absence of
responses from the network node at the known address, determine the
subnet mask which represents the subnet; OR stated another way an
apparatus in a network node coupled to a network having one or more
network nodes, the apparatus comprising storage means that stores a

processor routine for determining a network configuration, and a
processor loading the processor routine, the processor being commanded
by the processor routine to issue plural communication packets from
plural source addresses to at least one address known to be used in the
subnet to evoke responses, and, based on the presence or absence of
responses from the network node at the known address, determine the
subnet mask which represents the subnet; OR stated another way, a
processing device attached to a subnet in a packet communication
network for determining a subnet mask, the processing device comprising
means for providing possible subnet masks, means for issuing at least
one communication packet to the subnets defined by the respective
subnet masks, means for collecting responses from other network nodes
on the subnet, and, means for determining whether one of the subnet
masks represents the subnet.
classified in Class 370, subclass 254.

3.   Inventions I and II are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention I has separate utility such as in an
invention containing all of the components of Group I not used in an
invention containing all of the components of Group II.

4.   Inventions I and III are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention I has separate utility such as in an
invention containing all of the components of Group I not used in an
invention containing all of the components of Group III.

5.   Inventions II and I are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention II has separate utility such as in an
invention containing all of the components of Group II not used in an
invention containing all of the components of Group I.

6.   Inventions II and III are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention II has separate utility such as in an
invention containing all of the components of Group II not used in an
invention containing all of the components of Group III.

7.   Inventions III and I are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention III has separate utility such as in an
invention containing all of the components of Group III not used in an
invention containing all of the components of Group I.

8.   Inventions III and II are related as subcombinations disclosed as
useable together in a single combination. The subcombinations are
distinct from each other if they are shown to be separately useable. In
this instant case, invention III has separate utility such as in an

invention containing all of the components of Group III not used in an invention containing all of the components of Group II.

9.   Also an undue burden would be placed upon examiner since the search for each individually specific Group would be in a class and subclass not required for the other Groups as they other groups belong in a totally different class and subclass.

10.   Because these inventions are distinct for the reasons given above and because they have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter and the search for each Group is not required for the other Group, restriction for examination purposes as indicated is proper.

11.   Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

12.   The applicant is also advised that the response must be submitted to the Office within 30 calendar days.

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (703) 305-9692.   The examiner can normally be reached Monday thru Friday from 5:30 am to 2:00 pm and on weekends from 6:00 am to 12 noon Eastern Standard Time.

14.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack B. Harvey, can be reached on (703) 308-9705.   The fax phone numbers for the Group are (703) 746-7238 for After-Final, (703) 746-7239 for Official Papers, and (703) 746-7240 for Non-Official and Draft papers.

15.   Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

ROBERT B. HARRELL
PRIMARY EXAMINER
GROUP 2142